

Case Docket No.: 7240

Patent Department  
ZENITH ELECTRONICS CORPORATION  
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Mail Stop Patent Application  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450



Sir:

Transmitted herewith for filing is the patent application of

**Inventors:** Jin H. Kim and Serdar Ozen

**For:** EFFICIENT CONJUGATE GRADIENT BASED CHANNEL  
ESTIMATOR

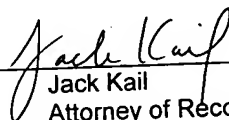
Enclosed are specification, claims, Declaration and Power of Attorney and  
four (4) pages of informal drawings.

**FEE CALCULATION**

| CLAIMS AS FILED |   |                     |                     |                     |                              |
|-----------------|---|---------------------|---------------------|---------------------|------------------------------|
|                 | (1)<br>FOR                                | (2)<br>NUMBER FILED | (3)<br>NUMBER EXTRA | (4)<br>RATE         | (5)<br>BASIC FEE<br>\$770.00 |
|                 | TOTAL CLAIMS<br>(20 allowed)              | 24                  | 4                   | \$18.00             | \$72.00                      |
|                 | INDEPENDENT<br>CLAIMS<br>(in excess of 3) | 4                   | 1                   | 86.00               | \$86.00                      |
|                 |   |                     |                     | TOTAL<br>FILING FEE | \$928.00                     |

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☐ References attached.

  
Jack Kail  
Attorney of Record  
Reg. No. 27,566

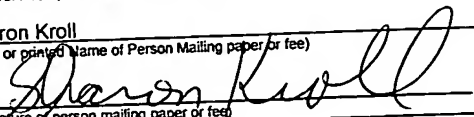
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APPLICATION, Alexandria, VA 22313-1450

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